

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Confirmation No.: **6730**

**DeFreese *et al.***

Group Art Unit: **2435**

Serial No.: **09/475,696**

Examiner: **Pich, Ponnoreay**

Filed: **December 30, 1999**

Docket No.: **60374.0029USU3/ A-6307**

For: **MECHANISM AND APPARATUS FOR ENCAPSULATION OF ENTITLEMENT  
AUTHORIZATION IN CONDITIONAL ACCESS SYSTEM**

**REPLY BRIEF UNDER 37 C.F.R. §41.41**

Mail Stop Appeal Brief - Patents  
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Sir:

The Appellants hereby submit a brief in reply to the Examiner's Answer dated  
August 31, 2009, in the patent application identified above.

**STATUS OF THE CLAIMS**

Claims 85-105 remain pending in the present application. The Examiner's Answer maintains the rejections of the claims under 35 U.S.C. § 103(a). With regard to the substantive remarks of the Examiner's Answer, Appellants respectfully disagree. Although Appellants address one or more of the issues raised in the Examiner's Answer, Appellants continue to repeat, re-allege, and incorporate by reference the positions and arguments set forth in the Appeal Brief.

### REPLY

The Examiner's Answer is based on the argument that *Campbell* discloses access to control data "independent of tuning to any particular programming channel/first service selected by the user." (Examiner's Answer, p. 15). However, *Campbell* fails to disclose such independent access as relied upon by the Examiner's Answers to maintain the present rejections.

The Examiner argues that *Campbell* may transmit control data via one or more channels used only for text data transmission. (Examiner's Answer, p. 15). The Examiner states that these designated channels use "an entire television signal frame" to transmit the control data. (Id.). However, the portions of *Campbell* relied upon do not disclose any such dedicated control data channel. The relied upon portions of *Campbell* state:

A text formatter system 54 receives data from a wide variety of sources such as weather, news, stock and others which are formatted for video transmission and then selectively transmitted in text form to the plurality of HVP units 52, 53. The text formatter system 54 preferably is comprised of a plurality of text formatters, each processing data from a text or graphics source. A variety of manufacturers produce equipment for cable television digital channels which are easily adaptable to the present system. One source of suitable conventional formatters is Video Data Systems, Happaque, L.I., N.Y.

Video signals are generated for input to each HVP unit by conventional sources, either from local video input sources as shown for HVP unit 52 or satellite video input sources for HVP unit 53. In either case, the signals are processed by a conventional channel processor 56 having modulator and demodulator units and a standard head end processor. Each television channel is preferably processed at base band video for purposes to be explained later.

The subscriber addressing and channel control data from PCS 50 is input to HVP 52 on line 41 where it is inserted in the vertical interval of the video signal. The channel control data from PCS 50 is processed at HVP 52 to generate scrambler signals, program identification signals, tier signals and eligibility code signals as will be discussed later. These signals are utilized by each subscriber's addressable converter 40 to determine the particular subscriber's authorization to

receive each program and to control descrambling of the video signals.

...

Moreover, as previously mentioned, the present invention may include one or more dedicated channels for only text data transmission using the "line" or video format which will be described more fully in FIGS. 2B and 11. By using most of the 525 lines of each television signal frame for text data transmission a vast quantity of text can be transmitted and received on a given channel using the transmitting and receiving apparatus of the present system. No special expensive data transmission or receiving equipment is required. (*Campbell*, col. 5, lines 7-37; col. 6, lines 52-61).

The cited sections of *Campbell* do not disclose a reserved channel for sending control data, but rather discuss the capability to broadcast a channel of teletext. (*Campbell*, Abstract) ("Moreover, full-channel teletext data in video line format may be transmitted on dedicated text channels with the modification of only head end processors."). This teletext page is described as **only** containing "text data". (*Campbell*, col. 6, lines 52-61). Such teletext pages in *Campbell* do not provide for the transmission of control data, as they solely transmit text transmission words formatted as shown in FIG. 11.

Second, the Examiner's Answer argues that the inclusion of control data in the VBI as described by *Campbell* allows for the control data to be accessed without tuning to the programming channel containing the control data. (Examiner's Answer, p. 16-17). In *Campbell*, control data may be transmitted via insertion in the VBI of a video signal. (*Campbell*, col. 6:31-45). The video signal may be transmitted and combined with other video signals on a plurality of frequencies. (*Campbell*, col. 4, line 66-col. 5, line 6). *Campbell* further appears to disclose an RF/Data Separator 100 which may receive a combined video signal. (*Campbell*, col. 8, lines 48-64). The RF/Data Separator 100 may direct "**subscriber**" control logic data to a converter control logic 104. (Id.)

The Examiner fails to recognize that the embodiment discussed in the cited portion of *Campbell* is a two-way interactive system to receive subscriber control input. Id. The disclosed embodiment provides for the addition of subscriber-provided control data to the provided control

data provided in the video stream. (Id.) The video stream (still containing the headend-inserted control data) may be transmitted to the tuner 106 upon tuning to a particular channel. Subsequent to tuning to the channel, a data extractor 114 may extract the control information from the VBI. (*Campbell*, col. 9, lines 5-16). The data extractor may then provide the extracted information to a control logic unit after the video stream is initially processed by the tuner. (Id.)

As such, *Campbell*, requires that if one wants to watch, say, video program A, not merely demodulating the signal to obtain the carried information from the VBI information, but in addition, tuning to the channel that carries video program A. That is, once a person using *Campbell's* system selects a channel that provides program A, the converter tunes to that channel, and then and only then can the VBI (and the codes) be accessed and the comparisons made.

As the Examiner's Answer provides no argument that *Hayes* overcomes these deficiencies of *Campbell*, Applicants respectfully request withdrawal of the rejections of Claims 85-105 under 35 U.S.C. § 103 relying on *Campbell* as a primary reference.

Applicants note that the Examiner's Answer contains at least one unidentified new ground of rejection. Namely, the Examiner's Answer is the first time the Examiner has presented arguments concerning the idea of transmitting control data on separate "dedicated channels". (Examiner's Answer, p. 16, 20). This argument is based on an alleged embodiment in *Campbell* never before broached by the Examiner. While Applicants recognize the right to file to petition to reopen prosecution under 37 C.F.R. § 41.39(b), it is believed that the newly presented argument by Examiner is simply a misreading of *Campbell* and is addressed above regardless.

**Conclusion**

In summary, it is Appellants' position that Appellants' claims are patentable over the applied cited art references and that the rejection of these claims should be overturned. Appellants therefore respectfully request that the Board of Appeals overturn the Examiner's rejection and allow Appellants' pending claims.

Respectfully submitted,

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